

Environmental Times

A newsletter for Coast Guard environmental management and compliance

Rear Admiral William M. Benkert Marine Environmental Award for Excellence

The U.S. Coast Guard Assistant Commandant for Marine Safety and Environmental Protection, Rear Admiral Thomas H. Gilmour, announced that corporations from Louisiana, Maine, Ohio, Oregon, Texas, Washington, and the United Kingdom are recipients of the 2004 William M. Benkert Environmental Award. The awards were presented during American Petroleum Institute (API) Tanker Conference on June 28, 2004, at the Rancho Bernardo Inn in San Diego, California.

The William M. Benkert Award is the premier national award that recognizes excellence in marine environmental protection. The evaluation process is competitive; standards are rigorous and demanding. This award was created to recognize vessel and facility operators who have implemented outstanding marine environmental protection programs – programs that far exceed mere compliance with industrial and regulatory standards.

The 2004 Benkert Award competition was comprised of six award categories: Large Business Vessel Operations, Large Business Facility Operations, Large Business Foreign Vessel Operations, Small Business Vessel Operations,

In This Issue

| III IIIIS ISSUE |
|--|
| The Council of Governments Kicks Off Ozone Season3 |
| Environmental Management Directives and Publications4 |
| CGHQ Environmental Management Division and Historic Lighthouses4 |
| Military Unlikely to Win Environmental Exemption5 |
| The Supreme Court Defines Limits of Search for Indirect Impacts5 |
| Tug Company Agrees to \$10 Million Fine for Oil Spill6 |
| Clean Air Act Development6 |
| Summary of Meeting Hosted by ASNE's Joint Committee on Environmental Engineering 6 |
| 2004 Closing the Circle Award Winners 7 |
| 2004 DHS Environmental Achievement Awards7 |
| Environmental Management Related Websites8 |
| Amphibian Decline and Toxicity Testing11 |
| Biodiesel: Alternative Fuel Survey and Design (G-SEN-3)12 |
| Bioremediation: Use of Bioremediation Products on Coast Guard Vessels |
| (G-SEN-3)13 |

Small Business Facility Operations, and Special Small Business Operations. The review board evaluated applications submitted in five of the six categories; no applications were submitted for consideration in the Small Business Vessel Operations category. The Assistant Commandant for Marine Safety and Environmental Protection approved the final selections.

The award is named in honor of Rear Admiral William M. Benkert (1923-1989), a distinguished Coast Guard officer widely known for his leadership and vision in marine environmental protection.

2004 Rear Admiral William M. Benkert Award Recipients

| Category | Award Level | Company | |
|----------------------------------|----------------------|---|--|
| Large Business | Gold | Alaska Tanker Company, LLC | |
| Vessel | Silver | Canal Barge Company, Inc. | |
| | | SeaRiver Maritime, Inc. | |
| | | Marathon Ashland Petroleum LLC | |
| | Honorable Mention | Ocean Shipholdings, Inc. | |
| Large Business Facility | Bronze | Todd Pacific Shipyards | |
| Large Business Foreign Vessel | Gold | International Marine Transportation, Limited | |
| Small Business Facility | | | |
| Special Small Business | Gold | Southeast Alaska Petroleum Resource Organization | |

(Benkert Awards continued on page 2)

Benkert Awards, continued from page 1

Profiles of the 2004 William M. Benkert Award Recipients

Alaska Tanker Company, LLC's (ATC's) application contained well-defined environmental policies and objectives with outstanding measurement tools. The company established performance contracts between owners, management, senior officers, and the ship's crew. These performance contracts identified clear and specific goals, measured trends, and/or areas for improvement that allowed ATC to identify mitigation strategies to produce positive results. Each year, the specific goals and objectives of these contracts are set at a higher standard than the year before. During 2002 and 2003, ATC transported approximately 311 million barrels of crude oil with less than 2.2 gallons of oil being spilled in the environment.

Canal Barge Company, Inc. has a formal management system in place based on annual corporate, departmental, and individual goals and objectives. Their goal is ZERO environmental incidents and safety injuries. The company has a financial incentive bonus program in place to ensure all personnel throughout the company get involved to achieve the established goal and objectives. Canal Barge Company's continued dedication to environmental excellence is further demonstrated through their community partnerships and outreach programs to educate children. They were the only maritime company to participate in EarthFest and reached some 20,000 children during the two-day event, educating them on environmental impacts of transporting goods and greatly increasing their environmental awareness.

In 2002 – 2003, **SeaRiver Maritime, Inc.** invested \$350,000 to develop and implement a proactive Loss Prevention System (LPS) designed to enable employees to be more actively involved in identifying and controlling risks. The system focuses on daily activities and enables corrective action long before an unacceptable outcome occurs. Their approach is "nobody gets hurts equals zero incidents." During 2003, SeaRiver had no environmental incidents. As a commitment of their environmental awareness, SeaRiver participates in a variety of forums with regulatory officials, industry partners, special interest groups, and the general public.

Marathon Ashland Petroleum LLC's (MAP's) devotion to preserving the environment was evident in the development of the company's Health, Environment, Safety, and Security (HESS) policy statement in which their environmental strategic goal is defined as a complete reduction in the number of any reportable spill or release, or any air/water permit that results in a non-compliance/notice of violation. These objectives branch off throughout the various organizations within MAP as a part of the company's annual performance goals and are shared by all employees. MAP's Performance Management System is used as an evaluation tool within the company, allowing for greater communication, employee involvement, and achievement toward their annual goals.

Ocean Shipholdings, Inc.'s (OSI's) vessels operate worldwide, including the sensitive environmental regions of Antarctica and Greenland. OSI's environmental polices are clear and concise covering the avoidance of damage to the environment with particular consideration to the marine environment. To meet the objectives of their mission and policy statements, risks are continually identified and evaluated to help reduce any impact on the environment. OSI also developed specific Marine Regulations to address the risks to vessels and the environment while operating in a harsh environment such as Antarctica.

Todd Pacific Shipyards reported exceptional performance measurements and results. Three environmental performance measures that demonstrated the success of the environmental policy changes implemented by Todd Pacific Shipyards are storm water improvements, reduced grit usage, and reduced hazardous waste disposal quantities. The storm water and treatment system is constantly monitored to ensure that the standards of the city of Seattle and King County that govern their receipt are met. The system is also being used to assist in developing a database that will predict the quality of a potential system overflow. Since the system became operational, it has consistently exceeded performance objectives.

International Marine Transportation, Limited's (IMT's) objectives and performance measures were clearly stated and thoroughly documented. The company placed strong emphasis on training and implemented a Safety, Health, and Environmental Awards program to solicit input from all employees. They also have a measurement and monitoring program in place with Key Performance Indicators (KPIs) that contain clear expectations, targets, and goals. IMT used these KPIs to produce scorecards that allow their stakeholders to review current performance and set future objectives. The fleet recently recorded 23 months without spilling any oil into the water, while transporting over 500 million barrels of crude oil and petroleum products involving nearly 1,500 port calls.

(Benkert Awards continued on page 3)

Benkert Awards, continued from page 3

Portland Pipe Line Corporation (PPLC) was established to transport crude oil by pipeline as an alternative for direct shipments of crude oil into Montreal East, Quebec by crude oil tankers. PPLC's environmental commitment is best demonstrated by their pollution prevention, preparedness, and safety management practices. PPLC installed a Harbor Marine and Engineering Corporation environmental monitoring management system. PPLC did an excellent job of developing a risk mitigation plan and tracking the progress of the follow-ups until completion. In the prevention area, they were the first in the U.S. to implement a one of a kind environmental monitoring and mooring management system, capable of displaying real-time information for tide height, water current, wind velocity, wind direction, and water temperatures to sea pilots, docking masters, and terminal Persons in Charge (PICs). This information is critical in assisting the pilots in their decision for aligning their vessels in the approach channel to remain in safer waters, and preventing damage to either the pier or vessel hull. Also, PPLC was clearly able to show in terms of percentages the dollar amount they invested into their partnerships and explain the impact their contributions made to organizations.

Southeast Alaska Petroleum Resource Organization (SEAPRO) is an oil spill response company for all of Southeast Alaska, which contains some of the most remote coastline in the United States. SEAPRO did an excellent job identifying their objectives and measuring the outcome of their activities. The company provided direction for the building of two response barges to enhance their oil spill response capabilities. The unique design of these vessels allows for the safe and rapid deployments of a small crew. The barges are more ergonomically correct, provide easier access to equipment, boom, and Personal Protective Equipment (PPE) stored onboard, and are capable of both towing and pushing. SEAPRO shared the design of the barges throughout the response community via the Association of Petroleum Industry Co-op Managers (APICOM). At the present time, there are several co-ops planning to have similar vessels built. SEAPRO showed a true commitment to environmental excellence by initiating new equipment designs that will ultimately have a positive impact on the response community and the environment.

If you have any questions, comments, or concerns, please contact the program coordinator LT Alexis Tune at (202) 267-0426 or via e-mail: <u>Atune@comdt.uscg.mil</u>.

The Council of Governments Kicks Off Ozone Season

Submitted by Ken Malmberg, G-SEC-3

The Council of Governments (COG) for the D.C. area recently held their annual kickoff for the ozone season. The same number of Code Red days is predicted for this year as last year, i.e., an annual average of six days usually in June and August. This year there is a new wrinkle. Readings of fine particles will also be announced, and if excessive, may generate Code Purple days. Negative health effects of fine particles are about the same as

exceedances of ozone. Sensitive groups are people with heart or lung disease, older people, and children.

Clean Air Partners, part of COG, also asked the attendees about placing some air quality monitors near their workplaces, and the Coast Guard is in the process of finding out if they will do that for Buzzard's Point. The Coast Guard would be able to monitor air quality in this area in real-time from Clean Air Partners' website (www.cleanairpartners.net). It would provide helpful information for anyone planning to run or walk at noon should there be a Code Red or Code Purple day in effect.

Additional sources of information:

Visit <u>www.cleanairpartners.net</u> or call (877) 515-4593 for real-time ozone data as well as helpful tips and educational materials on what you can do to help reduce ozone pollution.

Take Action at Work:

- ☑ Carpool, telework from home, or take mass transit
- ☑ Refuel after dark and limit car driving and idling
- ☑ Teleconference your meetings and brown bag your lunch

Take Action at Home:

- ☑ Exercise outdoors only during early morning hours
- ✓ Avoid using gas-powered lawn equipment
- ☑ Barbeque only with propane gas, not charcoal with lighter fluid
- ☑ Conserve electricity and set the thermostat to 78°F
- ☑ Consolidate trips and errands made with your car
- ☑ Don't use aerosol products
- ☑ Keep your car tuned and tires properly inflated
- ☑ If you must drive, use your most fuel-efficient car
- Don't paint with oil-based paints. Use environmentally safe paints and cleaning products.

Environmental Management Directives and Publications

The following environmental management directives and publications were published during the last five years. Each directive may be retrieved by clicking on the URL address listed below.

| Directive | Title | URL Address |
|-----------|---|---|
| P6280.3 | Management Guide for Refrigerants, Coolants and Fire Suppressants | http://cgweb.uscg.mil/CG-6/CG-61/cg61.shtml |
| P16475.6 | Environmental Considerations for Decision Making | http://cgweb.uscg.mil/CG-6/CG-61/cg61.shtml |
| P5090.1A | Commanding Officer's Environmental Guide | http://cgweb.uscg.mil/CG-6/CG-61/cg61.shtml |
| M16475.1D | National Environmental Policy Act (revised) | http://cgweb.uscg.mil/CG-6/CG-61/cg61.shtml |
| 5090.5B | Environmental Awards Program (revised) | http://cgweb.uscg.mil/CG-6/CG-61/cg61.shtml |
| 16475.3B | Floodplain Management and Protection | http://cgweb.uscg.mil/CG-6/CG-61/cg61.shtml |
| 16475.2B | Preservation of the Nation's Wetlands | http://cgweb.uscg.mil/CG-6/CG-61/cg61.shtml |
| 16004.2 | Coastal Zone Management | http://cgweb.uscg.mil/CG-6/CG-61/cg61.shtml |

Coast Guard Headquarters Environmental Management Division and Historic Lighthouses *Submitted by Dr. Daniel Koski-Karell, G-SEC*

Dr. Daniel Koski-Karell, the Cultural Resource Specialist for G-SEC at Coast Guard Headquarters, recently visited four New York lighthouses in USCG District 1 to perform fieldwork (i.e., inspection, mapping, photography) for nominating the lighthouses to the National Register of Historic Places (NRHP). The lighthouses visited on his trip were Race Rock, Little Gull Island, Orient Point, and Execution Rocks.

A special thanks to the Aids To Navigation Team (ANT) personnel, SCPO James Nolda, BM1 Ben Smith, and BM1 Adam Black of ANT Long Island Sound, and MCPO Anthony Gray and BM1 Marcelino Ortiz of ANT New York, for taking time out of their busy schedules to assist Dr. Koski-Karell in gaining access to the lights and hosting his visits.

The data and photographs compiled are necessary in order to list these properties on the NRHP. The nomination forms, which include histories and current descriptions of the lighthouse properties, will also serve as a means to assist nonprofit organizations and others in developing applications required to bid for lighthouse ownership under provisions of the National Historic Lighthouse Preservation Act (NHLPA). Listing on the NRHP will assist new private sector owners (once the lighthouses are transferred) by allowing them to be eligible for grants and tax breaks they would not otherwise be able to obtain. Visits to two other New York lighthouses were rescheduled due to delays from adverse wind and sea conditions.



Race Rock Lighthouse



Little Gull Island Lighthouse

Military Unlikely to Win Environmental Exemption

Reprinted from GovExec.com, May 6, 2004

House Armed Services Readiness Subcommittee Chairman Joel Hefley said that he has no plans this year to try to move a package exempting the military from several major environmental laws. House Energy and Commerce Committee Chairman Joe Barton told reporters his committee also would not take up a plan offered by the Pentagon to exempt the military from portions of three environmental laws – the Resource Conservation and Recovery Act, the Comprehensive Environmental Response Compensation and Liability Act (better known as the Superfund law), and the Clean Air Act.

The House Armed Services and Energy and Commerce committees have been battling for jurisdiction over the military environmental exemption issue. Hefley also said the exemption plan floated by the Pentagon is too broad and should be more narrowly tailored, like plans offered in the previous two years that Congress did not pass. Energy and Commerce ranking member John Dingell has rejected any military exemptions and rebuffed the Pentagon's argument that environmental laws compromise military readiness.

The Supreme Court Defines Limits of Search for Indirect Impacts

Submitted by Francis H. Esposito, G-LEL

Recently, the U.S. Supreme Court took a look at the indirect effects issue under the National Environmental Policy Act of 1969 (NEPA). In *Dept. of Transportation v. Public Citizen*, No. 03-358, argued April 21, 2004 and decided June 7, 2004, the Court reviewed the Federal Motor Carrier Safety Administration (FMCSA) regulations for trucks entering the border between Mexico and the United States. The specific circumstances may not occur too often. However, the Court does indicate that the scope of the required environmental assessment (EA) must be limited.

President Bush indicated that he would lift a NAFTA moratorium on Mexican trucks as soon as FMCSA promulgated its safety regulations. (Congress specifically directed FMCSA to promulgate safety regulations.) The Court held that FMCSA had to study the impact of the safety rules and not the president's decision to lift the moratorium. In other words, the EA could cover only emissions from trucks sitting at the border waiting to be inspected, not the total emissions of all trucks that would enter the country once the moratorium was lifted.

The Court also refused to consider arguments about other possible alternatives because of the plaintiffs' failure to raise those during public comment stages of the NEPA process.

The Court noted that "Consideration of the Council of Environmental Quality's (CEQ's) 'cumulative impact' regulation does not change this analysis." Since the transportation impacts inside the border are not effects of the action, there is no need to consider whether they would add to other pollutants to create a "cumulative effect."

Turning to the Clean Air Act conformity rules, the Court concluded "It cannot be said that FMCSA 'practicably control[s]' or 'will maintain control' over the vehicle emissions from the Mexican trucks, and it follows that the emissions from the Mexican trucks are not 'indirect emissions.'"

Very few Coast Guard actions will fall into this very narrow set of facts. However, the general notion that there is some limitation on the endless search for "connected acts" should be encouraging to program offices. It would seem clear that we can feel safer in the future with an EA in the rare cases where most of the impacts are beyond our actual control. The dictum is useful as a means of limiting the endless search for possible impacts of our action. Clearly, the sense of the Court is that we should not be required to endlessly study impacts of actions which we have no means of controlling. This could be applicable in some of the regulatory actions we take and possibly other programs. For the immediate future, we should be:

- More willing to pursue early NEPA action now that we have more assurance that the search for impacts will have some boundary;
- **More** aggressive in seeking public comment (to forclose attack on alternatives after the decision is made); and
- Less nervous about the need to study an infinite number of indirect impacts.

Obviously, each case will turn on its own specific facts. Your legal teams throughout the Coast Guard look forward to your call.

Tug Company Agrees to \$10 Million Fine for Oil Spill

Submitted by LT Curtis E. Borland, G-LEL

The U.S. Attorney for the District of Massachusetts issued a *press release* stating that Bouchard Transportation Company has agreed to plead guilty to violation of federal law relating to a 2003 oil spill in Buzzards Bay and to pay a criminal fine in the amount of \$10 million. The company will also be placed on probation for three years and will undertake a number of remedial measures to reduce the risk of future oil spills. The company will institute a maritime compliance program and will disclose to the government the results of its internal investigation. The government alleges that the company negligently violated the Federal Water Pollution Control Act (FWPCA) because its employee, the mate on watch on the tug, operated the tug in a negligent manner and because the company had allowed the mate to remain at the helm despite repeated concerns about his competency. The government also alleges that the company violated the Migratory Bird Treaty Act (MBTA) by killing protected birds as a result of the oil spill. It should be noted that the MBTA is a strict liability criminal statute.

Clean Air Act Development

Submitted by Lynn Capuano, G-LEL

The U.S. Supreme Court vacated a Ninth Circuit Court of Appeals ruling upholding the validity of California's South Air Quality Management District's Fleet Rules on the purchasing and leasing of vehicles that meet certain emissions requirements. The Fleet Rules require various public and private fleet operators to purchase alternative fuel vehicles or vehicles that meet certain emission specifications established by the California Air Resources Board. In its decision in *Engine Manufacturers Association* v. *South Air Quality Management District*, 2004 WL 893964 (2004), the Court held that the Fleet Rules are, at least in part, preempted by Section 209 of the Clean Air Act. Section 209 prohibits the adoption or attempted enforcement of any state or local "standard relating to the control of emissions from new motor vehicles or new motor vehicle engines." The Court found that the Ninth Circuit's distinction between purchasing requirements and sale requirements did not stand up to the plain meaning of the word "standard" as used in the Clean Air Act. The Court, however, did not hold that Section 209 preempted the Fleet Rules in toto. Rather, the Court remanded for further proceedings to determine whether the Fleet Rules could stand in part. Justice Souter offered the lone dissent.

Summary of Meeting Hosted by American Society of Naval Engineers' (ASNE's) Joint Committee on Environmental Engineering

Submitted by Ken Malmberg, G-SEC

Steve Andersen from the Environmental Protection Agency (EPA) discussed the military services and climate change. The EPA and Department of Defense (DOD) see climate change as a national security issue, as well as a pollution issue, with problems of disease, hygiene, and ocean impacts leading the list. These possible outcomes of climate change create problems with both training and operations in the military. The Navy is particularly affected by current indicators of ocean warming and thermoclines as this affects reliability of their underwater detection and navigation devices.

Also presented was an overview of the military's contribution to developing alternatives to ozone depleting substances (ODSs) and halons. The Coast Guard Research and Development Center (RDC) has several research efforts ongoing with the Navy, and G-MSE contributed to initial testing and development of performance standards for the development of several favorable ODS alternatives. This research helped EPA to promote their New Alternatives list, which in turn has significantly reduced the use of ODS throughout the public and private sectors, and, via international cooperation, throughout the world. Alternatives have also been developed for shipboard applications, and research information gathered by the military has been shared with commercial shipping fleets. As a result, the worldwide release of climate change pollutants is being reduced, but much work remains to be done.

Another significant climate change research area is the development of alternatives to petroleum based fuels. Mr. Andersen presented some statistics on the Army's "hybrid-electric" Hummer® and other experimental solutions to the logistics problem of supplying large amounts of fuel to ground vehicles, and the direct reduction of air emissions as a result of reducing dependency on large amounts of fossil fuels.

2004 Closing the Circle Award Winners

The Department of Homeland Security is pleased to announce the 2004 White House Closing the Circle (CTC) award winners and honorable mentions. The Federal Law Enforcement Training Center won an award for their work on Green Ammunition. USCG Air Station Cape Cod received an honorable mention for their EMS Effort. Congratulations to each of the facilities and individuals, and thank you once again participating in the awards program. We had an outstanding batch of nominations this year, which is a tribute to each of you as well as your individual facilities. The judging was extremely tough and to receive such recognition this year is very significant.

The awards were presented in five categories:

- Recycling
- Waste/Pollution Prevention
- Environmental Management Systems
- Sustainable Design/Green Building
- Green Purchasing

2004 Department of Homeland Security Environmental Achievement Awards

This year, four Coast Guard units have been recognized for their environmental efforts by being named recipients of the 2004 Department of Homeland Security Environmental Achievement Award. The units are Air Station Cape Cod, ISC Kodiak, ISC Miami, and ISC Seattle. The winners received the following letter signed by Mr. Juan J. Reyes (SES) of DHS and a plaque recognizing the unit's accomplishments along with an individual certificate for each team member.

Congratulations! You have won a 2004 Department of Homeland Security Environmental Achievement Award for your nomination.

The Department has called upon its employees to lead by example in protecting the environment and being good stewards of our natural resources. Your nomination is an outstanding example of meeting this challenge. I look forward to sharing your story with others.

A plaque recognizing your unit's accomplishment will be sent to you along with a certificate for each member of your team. As this is the first year for the award, this will take a little time but we will keep you informed of our progress.

Keep up the great work in helping improve the Department's and the federal government's environmental compliance and management efforts.

Juan J. Reyes Director, Office of Safety and Environment Office of Administrative Services

2004 DHS Environmental Achievement Award Winners

| Unit | Title of Nomination | Category | |
|----------------------|--|-------------------------------------|--|
| Air Station Cape Cod | EMS at Coast Guard Air Station Cape Cod | Environmental Management Systems | |
| ISC Kodiak | Model Hazardous Materials Minimization Center at Integrated Support Command Kodiak, Alaska | Waste/Pollution Prevention | |
| ISC Miami | USCG ISC Miami Waste/Pollution Prevention | Waste/Pollution Prevention | |
| ISC Seattle | Closed-Loop Hazardous Materials Procurement and Waste Reduction | Waste/Pollution Prevention | |

Environmental Management Related Websites

The following websites are related to Environmental Management. A brief description of each website is given along with the website address.

Wildlife Habitat Council

www.wildlifehc.org

The Wildlife Habitat Council (WHC) is a nonprofit, nonlobbying 501(c)(3) group of corporations, conservation organizations, and individuals dedicated to protecting and enhancing wildlife habitat.

WHC helps large landowners, particularly corporations, manage their unused lands in an ecologically sensitive manner for the benefit of wildlife, and also works to broaden understanding of wildlife values. Over 120 companies are WHC members as are two dozen conservation organizations, plus many supporters and contributors. Over two million acres in 48 states, Puerto Rico, and fifteen other countries are managed for wildlife through WHC-assisted projects.

Habitat projects on these lands are corporate-driven cooperative efforts between management, employees, community members, local conservation groups, and local, state, and federal agencies.

WHC can be contacted by e-mail at *Whc@wildlifehc.org* or by calling (301) 588-8994.



Five-Star Restoration Program

The Five-Star Restoration Program brings together citizen groups, corporations, students, landowners, youth



conservation corps, and local, state, and federal government agencies to restore streambanks and wetlands across the country. It provides grants, technical support, and information exchange to help communities build strong partnerships that work together on restoration projects. Through education, outreach, training activities, and some old-fashioned hard work, communities learn to build diverse partnerships and foster local natural resource stewardship.

Primary funding for the program is provided by the Wetlands Division of the U.S. Environmental Protection Agency's Office of Wetlands, Oceans, and Watersheds and the National Marine Fisheries Service's Community-Based Restoration Program. They work with the National Association of Counties, the National Fish and Wildlife Foundation, and the Wildlife Habitat Council to select projects and distribute funds.



The National Fish and Wildlife Foundation is the only congressionally mandated foundation that works toward the conservation of fish, wildlife, plants, and the habitat on which they depend. The Foundation is the managing partner of the Five-Star Program. Website: www.nfwf.org.



The National Association of Counties (NACo) is the only national organization that represents county governments in the United States. NACo provides members with legislative, research, assistance, and public affairs services. Website: www.naco.org.



The Wildlife Habitat Council (WHC) is a nonprofit, nonlobbying organization dedicated to increasing the quality and amount of wildlife habitat on corporate, private, and public lands. WHC devotes its resources to building partnerships with corporations and conservation groups to create solutions that balance the demands of economic growth with the requirements of a healthy, biodiverse, and sustainable environment. Website: www.wildlifehc.org.



The Environmental Protection Agency (EPA), Office of Wetlands, Oceans, and Watersheds believes local citizens play an important role in achieving a community's water quality goals. EPA provides technical and financial assistance and develops regulations and guidance to help communities to meet their watershed challenges. Website: www.epa.gov/owow.



The National Oceanic and Atmospheric Administration's (NOAA's) Fisheries Restoration Center manages the Community-based Restoration Program to provide funding for restoration projects that address important habitat issues concerning marine and anadromous fish, endangered species, and marine mammals in coastal communities. It has been a major federal partner provided funding for coastal projects. Website:

www.nmfs.noaa.gov/habitat/restoration.

For more information, contact the EPA Wetlands Information Helpline at (800) 832-7828 or one of the points of contact listed below.

| Point of Contact | Organization | Telephone | E-mail |
|------------------|--|----------------|--------------------------|
| Jason Shedlock | The National Association of Counties | (202) 393-6226 | jshedloc@naco.org |
| Tom Kelsch | National Fish and Wildlife Foundation | (202) 857-0166 | kelsch@nfwf.org |
| Mandy Chesnutt | Wildlife Habitat Council | (301) 588-8994 | mchesnutt@wildlifehc.org |
| John Pai | EPA, Wetlands Division | (202) 566-1350 | pai.john@epa.gov |
| Alison Ward | NOAA Restoration Center | (301) 713-0174 | Alison.Ward@noaa.gov |

U.S. Fish & Wildlife Service - Fish and Wildlife Management Program

www.fws.gov and fisheries.fws.gov

The U.S. Fish & Wildlife Service is a bureau within the Department of the Interior. Their mission is to work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. It is the only agency of the U.S. government with this primary mission. The Fish & Wildlife Service's programs are among the oldest in the world dedicated to natural resource conservation.

The Service manages the 93 million acre National Wildlife Refuge System of more than 520 National Wildlife Refuges and thousands of small wetlands and other special management areas. Under the Fisheries program, it also operates 66 National Fish Hatcheries, 64 fishery resource offices, and 78 ecological services field stations.



The Service helps protect a healthy environment for people, fish, and wildlife, and helps Americans conserve and enjoy the outdoors and our living treasures. The Service's major responsibilities are for migratory birds, endangered species, certain marine mammals, and freshwater and anadromous fish.

Among its key functions, the Service enforces federal wildlife laws, protects endangered species, manages migratory birds, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, and helps foreign governments with their international conservation efforts. It also oversees the Federal Aid program that distributes hundreds of millions of dollars in excise taxes on fishing and hunting equipment to state fish and wildlife agencies.

The vast majority of fish and wildlife habitat is on non-federal lands. The Partners for Fish and Wildlife, Partners in



Flight, Sport Fishing and Boating Partnership Council, and other partnership activities are the primary mechanisms for assisting voluntary habitat development on private lands and fostering aquatic conservation.

The Service employs approximately 7,500 people at facilities across the United States. The Service is a decentralized organization with a headquarters office in Washington, DC, seven geographic regional offices, and nearly 700 field units. Among these are national wildlife refuges, national fish hatcheries and management assistance offices, and law enforcement and ecological services field stations.

U.S. Fish & Wildlife Service - National Wetlands Inventory Program

wetlands.fws.gov

The National Wetlands Inventory (NWI) Program of the U.S. Fish & Wildlife Service produces information on the characteristics, extent, and status of the Nation's wetlands and deepwater habitats. Information from the National Wetlands Inventory is used by federal, state, and local agencies, academic institutions, U.S. Congress, and the

private sector. Congressional mandates in the Emergency Wetlands Resources Act require the Service to map wetlands and to digitize, archive, and distribute the maps. With funding from other federal, state, tribal, local, and private organizations, the Service has produced final maps for much of the nation. About half are digitized and available to the public on the Internet. Private companies provide NWI data in various other media. Hard-copy maps are available through cooperator-run distribution centers.

A Congressional mandate also requires the Service to produce status and trends reports to Congress at ten-year intervals. They also produce other publications, including manuals, plant and hydric soils lists, field guides, posters, wall-size resource maps, atlases, state reports, and numerous articles published in professional journals.



NWI is headquartered in Arlington, Virginia, under the Division of Habitat and Resources Conservation, in the Branch of Habitat Assessment, with a small staff for management issues. National Wetlands Inventory Regional Coordinators produce maps and reports, provide quality control, training, technical assistance, and regional liaison. The nexus of NWI mapping is the National Wetlands Inventory Center (NWIC) located in St. Petersburg, Florida,



providing support and quality control for mapping. It houses a state-of-the-art computer operation which is responsible for incorporating the digital data to construct and maintain the wetlands layer of the National Spatial Data Infrastructure.

NWI maps and digital data are distributed widely throughout the country and the world. They have distributed over 1.9 million hard-copy maps and over 1.9 million digital wetland map files since they were first introduced and customers have printed another 1.4 million custom maps. NWI wetlands status and trends and other reports are used widely and referenced in policy decisions.

U.S. Geological Survey (USGS) – Earth Resources Observation Systems (EROS)

edc2.usgs.gov/earthasart

The U.S. Geological Survey's (USGS') Earth Resources Observation Systems' (EROS') Earth as Art Collection is a special collection of images that record events of historic significance, beautiful sights, or images that stir the imagination. An image of the Yellowknife Wetlands appears below.



Name: Yellowknife Wetlands

Date: July 2001 **Source:** Landsat 7

Scale: 1'' = 2.8 miles (4.5 km)

Description: Extensive wetlands lie near the town of Yellowknife, near the Great Slave Lake in Northwest Territories, Canada. The shallow lakes seen in this image have formed in grooves in the landscape that were carved by glaciers during the last Ice Age.

Amphibian Decline and Toxicity Testing

Amphibians are often valuable as an indication of the environmental quality of wetland and forest ecosystems. The amphibian's unprotected, permeable skin is susceptible to chemical contamination and ultraviolet (UVB) radiation. Considerable research has been dedicated to evaluate the potential toxicity to amphibians.

The decline and disappearance of amphibian species has become a worldwide concern. According to the U.S. Fish and Wildlife Service's (USFWS') Threatened and Endangered Species System (TESS), there are currently 21 federally listed amphibian species that are classified as threatened or endangered (updated June 25, 2004). Developmental abnormalities in amphibians are also a concern. Factors contributing to the decline and deformation of amphibian populations include:

- Climate change
- Habitat loss and alteration of forests and wetlands
- Introduction of alien species
- Environmental contaminants (e.g., pesticides, chemicals, agricultural runoff, etc.)
- Increased levels of ultraviolet radiation
- Increased acid precipitation
- Disease

While there is no single factor responsible for the overall decline of amphibian populations, it is likely that each of these environmental stressors contributing to the problem.

Federal, state, and local government agencies are working together with private industry and environmental organizations to reduce the decline of threatened and endangered amphibian species in a number ways including the use of toxicity testing. Some of the organizations dedicated to reducing the decline of amphibian populations include the Declining Amphibian Populations Task Force (DAPTF), Partners in Amphibian and Reptile Conservation (PARC), Taskforce on Amphibian Declines and Deformities (TADD), and Amphibian Conservation Alliance (ACA).

The U.S. Navy is one such organization that is pursuing amphibian toxicity testing. The Navy is working with other federal agencies and private contractors to conduct further research in this field. The Navy also has an interagency partnership in place with the Coast Guard.

The Navy is undergoing an effort to develop a new toxicity testing method. The Coast Guard has been approached to join this effort. A Navy research program is providing direct funding to the private contractors involved in the effort.

(Amphibian Decline continued on page 12)

Amphibian Decline, continued from page 11

The Navy's <u>Amphibian Ecological Risk Assessment Guidance Manual</u> provides the framework for a two-tiered standardized ecological risk assessment (ERA) protocol to evaluate potential risks to amphibians at sites owned and/or operated by the Navy. This protocol can be used to help the Navy avoid costly and unnecessary wetland alteration based on the use of inappropriate ecological endpoints.

There are several ways that you can help to slow the decline of amphibian populations. Wetlands can be restored, protected from future destruction, or created where none exist. The publication, *Amphibian Declines: An Issue Overview*, makes the following recommendations to prevent the further decline of amphibian populations.

- Enforce the protection of ecosystems to save native habitats (including wetlands and forest remnants) which will benefit amphibians and other wildlife
- Promote the strict regulation of toxic chemicals, invasive alien species, and greenhouse and ozone-depleting gases and curb the use of such products
- Inventory and monitoring of amphibian populations
- Education on the ecological and cultural significance of amphibians
- Promote the sustainable use of amphibians and their habitats
- Promote the training of herpetologists

Additional sources of information:

- Amphibian Declines: An Issue Overview (a joint publication of the Federal Taskforce on Amphibian Declines and Deformities (TADD), Partners in Amphibian and Reptile Conservation (PARC), the Declining Amphibian Populations Task Force (DAPTF), and the Amphibian Conservation Alliance (ACA), http://www.frogweb.gov/declines.pdf.
- The National Biological Information Infrastructure's (NBII's) FrogWeb (http://frogweb.nbii.gov/) provides information regarding amphibian declines and deformities.
- Amphibian Ecological Risk Assessment Guidance Manual (U.S. Navy), http://web.ead.anl.gov/ecorisk/methtool/pdf/TR-2245-ENV.pdf.

Biodiesel: Alternative Fuel Survey and Design (G-SEN-3)

Reprinted from Systems Times, Spring 2004

The future smells like french fries. The Office of Naval Engineering's Environmental Division (G-SEN-3) is partnering with the Engineering Logistics Center (ELC), the Coast Guard Academy (Academy), and the Naval Air Systems Command (NAVAIR) to develop a standard for the use of Biodiesel on Coast Guard vessels. Biodiesel can be made from any fat or vegetable oil, such as soybean oil. It's nontoxic, biodegradable, and works in any diesel engine with few or no modifications. Although Biodiesel contains no petroleum, it can be blended with petroleum diesel at any level, the most common mixture being "B20," which is 20% Biodiesel and 80% diesel. Biodiesel is the only recognized alternative fuel that meets the Environmental Protection Agency's (EPA's) rigorous Health Effects testing as required by the Clean Air Act. Among the other positive traits of Biodiesel is the reduction of particulate matter in emissions, 80 to 90% reduction in potential cancer causing compounds called polycyclic aromatic hydrocarbons (PAH) and nitrated PAH, and reduction of unburned hydrocarbons that are a contributing factor to smog and ozone. A common side effect of Biodiesel is the familiar smell of french fries when burned.

This joint effort is part of a capstone senior design project for six Mechanical Engineering First Class Cadets at the Academy. Their efforts will focus on source of supply, warranty issues with current Coast Guard engines, and performance impacts on a marine diesel generator located in the Academy's Power Lab. Fuel hoses, gaskets, and seals will be evaluated by an independent lab to ensure they do not deteriorate when subjected to Biodiesel.

(Amphibian Decline continued on page 12)

Biodiesel, continued from page 12

Biodiesel has become a common word throughout the military with numerous branches and installations utilizing the fuel for their ground fleets. Naval Base Ventura County even creates Biodiesel from recycled cooking oil on the base. The Coast Guard would be the first service to use Biodiesel in the marine environment. However, significant hurdles must be addressed before the Coast Guard is ready to use Biodiesel in the fleet. These hurdles include cold weather storage, cold weather operability, emulsification in water, and compatibility between fuel loads.

In the near future, Biodiesel will provide the Coast Guard with an alternative fuel source that helps reduce our dependency on foreign oil while reducing the impact on our environment.

For more information, contact LT Jon Baker (G-SEN-3) at (202) 267-1998 or LTJG Andy Goshorn (G-SEN-3) at (202) 267-2003.

Bioremediation: Use of Bioremediation Products on Coast Guard Vessels (G-SEN-3)

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There are many bioremediation products on the market that utilize aerobic microbes, commonly referred to as "bugs," to consume petroleum products. Use of microbial-based cleaners has proven effective for removing sludge buildup in hard to reach bilge pockets, significantly reducing oil content in oil-water holding tanks, mitigating oil spills, and in various other situations where removal (or in this case, consumption) of petroleum products is desired.

We are looking to endorse the use of bioremediation products as being a safe and effective alternative for use in specific applications aboard Coast Guard vessels. The Navy performed a health hazard assessment during use of the "bugs" in a bilge cleaning evolution on Coast Guard Cutter (CGC) NORTHLAND to ensure personnel using such products would not be subjected to any adverse health risks. The National Institute for Occupational Safety and Health (NIOSH) analyzed the results and concluded that there is a "low potential" for adverse health effects among personnel who use microbial-based cleaners during bilge and other cleaning processes. We are awaiting concurrence from the Navy Environmental Health Center (NEHC).

Testing is underway in an accelerated lab environment to evaluate these biological cleaners to ensure they will have no negative impact on vessel machinery materials, such as tank walls, bilge plating, coatings, gasket materials, oil content monitors, et al. If this evaluation is successful, we will soon be able to authorize and recommend specific, affordable bioremediation products for use on Coast Guard vessels.

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Office of Civil Engineering
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EDITORS & CONTACT INFORMATION

Martin Nguyen
U.S. Coast Guard
Environmental Management
Division
(202) 267-2342
mnguyen@comdt.uscg.mil

Stephanie Muska Potomac Management Group, Inc. (703) 836-1037 smuska@potomacmgmt.com

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The Environmental Times is a quarterly publication designed to keep Coast Guard personnel apprised of environmental issues impacting Coast Guard facilities, operations, planning, and policy making. We encourage you to share your stories and successes as environmental stewards.